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ABSTRACT

The professional orientation difference approach was operationalized as a stress on the importance of intellectual activity, autonomy, service and influence, with de-emphasis on the monetary, prestige, security and human relations aspects of a job. As a difference score, the index was subject to special reliability problems. This analysis identified six factors associated with the index. These included importance of expressiveness, learning, human relations, advancement, job security, and influence/prestige. Criterion variables were used to test the validity of these factors as professional orientation components. The influence/prestige factor was positively related to experience, organizational involvement, and management job activity variables. The advancement, job security, and learning factors were negatively related to education, experience, and organizational involvement. Expressiveness was unrelated to the criterion variables, while human relations was negatively related to income. The author concluded a traditional difference score approach to a professional orientation measure was unreliable. Results argue for a temporal notion of the professionalization process assuming that an orientation toward human relations, advancement, security, and prestige job aspects may be a necessary prelude to a stress on autonomy, expertise, service, and commitment. The validity of a particular professional orientation measure should not be automatically assumed. (Author/DWH)

RELIABILITY AND VALIDITY ISSUES ASSOCIATED WITH THE MCLEOD-HAWLEY INDEX OF PROFESSIONAL ORIENTATION

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ABSTRACT

This secondary analysis examines evidence for the reliability and validity of the traditional "difference" approach to a professional orientation measure. Developed by McLeod and Hawley (1964), the professional orientation difference approach is operationalized as a stress on the importance of intellectual activity, autonomy, service, and influence, with de-emphasis on the monetary, prestige, security and human relations aspects of a job.

As a difference score (the 12 "pro" items are summed, taken times a factor of two to correct for response bias, and subtracted from the 12 summed "non-pro" items), the index is subject to special reliability problems; there must be little if any positive correlation between the construct's positive and negative components for a reliable difference score.

Reanalysis of an earlier photojournalists study (Slattery, 1977) found a reliability coefficient of less than zero; those items thought to represent the pro items are as strongly correlated with the non-pro items as they are correlated among themselves.

The current study, using data from a random mail survey of members of the Public Relations Society of America, identifies six factors associated with this index: importance of expressiveness, learning, human relations, advancement, job security, and influence/prestige (in order of stress placed on these attributes). Five factors are similar to those of earlier studies of American journalists (McLeod and Hawley, 1964), Turkish journalists (Nayman, 1970), advertising agency personnel (Ward, 1965), and photojournalists (Slattery, 1977). The pro and non-pro items are strongly correlated ($r = .80$) creating an unreliable difference measure ($r = .04$).

Criterion variables are used to test the validity of these factors as professional orientation components. The influence/prestige factor is positively related to experience, organizational involvement, and management job activity criterion variables. The advancement, job security, and learning factors are negatively related to education, experience, and organizational involvement. Expressiveness is unrelated to the criterion variables, while human relations is negatively related to income.

This study concludes that the traditional difference score approach to a professional orientation measure is unreliable. It challenges the assumption that professional orientation precludes an orientation toward the security, prestige and human relations job aspects. The study argues for a temporal notion of the professionalization process assuming that an orientation toward human relations, advancement, security, and prestige job aspects may be a necessary prelude to a stress on autonomy, expertise, service and commitment. Finally, the paper calls for careful explication of those attributes thought to underlie a professional orientation with validation by several approaches prior to assuming the validity of a particular professional orientation measure.

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The Professionalism Concept

Mass communication students have long been intrigued with the notions of professionalism and professionalization processes. In 1937 Rosten found that Washington correspondents who described themselves as "professionally-oriented" behaved differently and had different self-images than "less professionally-oriented" newsmen. Breed (1955) determined that professional newspaper journalists performed more independently than less professionally-oriented newspapermen. Stark (1962) found West Coast "professional" newsmen to have more liberal attitudes, to disagree more with publishers' conservative policies, and to not hold their own newspapers in high regard. McLeod and Hawley (1964) developed a professional orientation index of 24 items and surveyed editorial and non-editorial employees of the Milwaukee Journal and Sentinel. Those scoring high on this index used somewhat different cognitive judgments--frames of reference--differentiating them from those who scored lower on the index. Also, the authors report "high" professionals more strongly desired the implementation of professional values, and tended to hold more critical attitudes toward their papers.[1]

The notion of a profession can be traced to 18th Century English society (Reader, 1966). Because of English tradition and law, property passed from father to eldest son. Those who were not first born "gentlemen" turned to positions in the government, military service, medicine, law and religion. These latter three occupations often are considered the models for ideal professions. Entry into these occupations required a liberal education grounded in the classics and mathematics. However, as various trades associated with these occupations began to move into the universities, notions of professionalism emerged. Apothecaries and surgeons were considered tradesmen,

while physicians were members of the upper class and "professionals." Professional associations developed with the objective of including only those who were considered "competent" into the ranks of the profession.

This trend continued with industrialization and criticism of the laissez faire economy at the turn of the century. Professionalization was seen to serve a function in society; i.e., the reconcilement of individual and community or collective interests (Barber, 1965).

Nayman (1973), in his excellent review of professionalism and communicator analysis studies, traces modern definitions of profession, professionalism and professionalization to Merton's (1960) notion of social values that comprise the concept of profession.

> These are first, the value placed upon systematic knowledge and the intellect: knowing. Second, the value placed upon technical skill and trained capacity: doing. And third, the value placed upon putting this conjoint knowledge and skill to work in the service of others: helping. (p. 9)

Profession is defined by Nayman as ". . . the possession of a set of specific characteristics by an occupation which distinguishes it from other occupations." Professionalism ". . . is used to describe particular attributes of the members of an occupation which may or may not possess the full characteristics of a profession." Finally, professionalization is a ". . . term that refers to a process through which members of an occupation attempt to achieve the specific characteristics of an established profession." (p. 206)

The specific characteristics or attributes referred to in these definitions differ somewhat depending upon the object of study and the researcher. McLeod and Hawley (1964) argue that eight criteria are essential for professionalization to occur. Hughes (1965) also suggests that an occupation must meet eight somewhat similar criteria to be considered a profession. Blau and Scott (1962) and Greenwood (1957) argue for five, but not necessarily the same five,

attributes. Nayman (1973) maintains that based upon the literature of occupational sociology, four attributes are essential for an occupation to become a profession: expertise, autonomy, commitment, and responsibility.

> Expertise is based on the belief that specialized knowledge and skill are vital requirements for a professional to perform in a society. The professional acquires his knowledge and skills through prolonged education and experience. On the other hand, professional autonomy allows the qualified practitioner to utilize his judgment without outside interference. Commitment is the outcome of expertise in the sense that a professional should devote his lifetime to his much-sought-after knowledge and skill without emphasizing the pecuniary benefits of his profession. Finally, responsibility is based on the belief that the power conferred by expertise entails fiduciary relationship to society. (p. 198)

Figure 1 compares the criteria suggested by these students of professionalism. The criteria proposed by McLeod and Hawley (1964) and later further explicated by Nayman (1973) are indeed similar to those proposed by other students of professionalism, with the exception of the requirement by McLeod and Hawley that the service provided by the occupational group must be unique and essential.

The McLeod-Hawley Professionalism Index

McLeod and Hawley (1964) used their eight criteria for a professional orientation to develop a 24-item index. Table 1 reproduces the 24 items used in this study. The first 12 items, according to McLeod and Hawley, are characteristics professionally-oriented people should value, and the 12 non-professional items are representative of characteristics they should place less importance on.

Since 1964, this index has been used with such diverse communicator groups as advertising agency personnel (Ward, 1965), journalists in India (Eapen, 1969), Turkish journalists (Nayman, 1970), Latin American journalists (McLeod and Rush, 1969), news photographers (Coldwell, 1974), and public relations practitioners (Hallahan, 1974). In addition, two studies have used

this index to examine the differences between male and female news photographers (Slattery and Fosdick, 1979), and male and female public relations practitioners (Jacob, 1979). Since its development, this index, or some version of it, has been used in 13 masters theses or dissertation researches conducted at the School of Journalism and Mass Communication, University of Wisconsin-Madison (Hawley, 1964; Ward, 1965; Eapen, 1969; Coldwell, 1970; Linehan, 1970; Nayman, 1970; Graf, 1971; LeRoy, 1971; Lattimore, 1972; Hallahan, 1974; Idsvoog, 1975; Slattery, 1977; and Jacob, 1979).

In discussing the history of the development of this index, Nayman (1973) reports,

> This trend-setting investigation made a theoretical contribution. Instead of emphasizing the uniqueness of the journalistic occupation as did speculative arguments and, to some degree, previous descriptive studies, the researchers considered journalism as an emerging profession in which its members possess some of the attributes of professionalism . . . McLeod and Hawley provided an alternative approach which was comparative in nature and was intended to define essential criteria of professionalization applicable to all occupations and professions. (p. 202)

Nayman concluded that "standard measures to obtain comparative and cumulative data" were useful to the study of the professional orientation of communicators. Studies which followed from the McLeod and Hawley (1964) research typically dichotomized or trichotomized the communicator group(s) under study based upon scores on a summed index of these 24 items. The authors then compared the means of these groups for other cognitive and affective variables thought to be related to a professional orientation.

Recently Windahl and Rosengren (1978), offered a serious challenge to this methodology. They report, as have several of the studies conducted in the McLeod and Hawley tradition, that when a factor analysis is conducted on these 24 items, some of the factors contain both professional and non-professional items. Also, Windahl and Rosengren argue that professionalism

has at least two dimensions which may not be as incompatible with one another as the traditional assumptions of the McLeod-Hawley scale would suggest. Windahl and Rosengren found both a security dimension and a professional dimension in their study of Swedish journalists. They argue that professionals, as well as non-professionals, can be either secure or insecure, yet the traditional methodology associated with the McLeod-Hawley index assumes that a professional orientation is incompatible with a search for other types of rewards. When Windahl and Rosengren controlled for their security dimension, they found a negative relationship between professionalism (the 12 professional items summed into an index) and education. Prior to controlling for search for security, however, professionalism and education were positively correlated, as is usually argued by the theoretical notions of professionalism.

Reliability Issues

Because of the questions raised by the Windahl and Rosengren (1978) study, the author of this paper set out to conduct a systematic analysis of the available evidence supporting the reliability and validity of this index.

There are several approaches to reliability. Seltiz, et al., (1961) argue that reliability can be viewed from a stability perspective or an equivalence one. A stability approach asks whether the measures produce the same results over time with the same group or a similar one. Equivalence is concerned with the consistency of the results--the extent to which different researchers using the same instrument to measure the same individuals at the same time (or using different instruments with the same individuals at the same time) would find the same results.

One measure of equivalence is called "coefficient alpha." It is the average split-half correlation for all possible ways of dividing the test into two parts. None of the early studies attempted to apply this relatively simple

measure of consistency; however, a recent study (Jacob, 1979) computed a coefficient alpha for both the professional (.80), and the non-professional (.77) items. In addition, coefficient alpha was computed separately for males and females in the sample. Females had a higher coefficient alpha than males for both the professional and non-professional orientation items.

Two of the earlier studies reported another measure--item-to-index correlations--which they called a measure of reliability. Table 1 details these item-to-index correlations. Also, McLeod and Hawley (1964) performed a similar analysis which they called a measure of "internal consistency." They used the same strategy of correlating each item with the total professional orientation index. They found, "For only 14 of the 24 items, however, was the correlation significant." (p. 531) When interpreting item-to-index correlations, it should be noted, as Kerlinger (1973) stresses, this strategy assumes the total index is a valid one.

Some of the lack of attention to issues of reliability may be due to the widespread use of this index. For example, Lattimore (1972) dismisses the whole reliability issue when he states, "Since the professionalism questionnaire has been used several times previously, its reliability already has been established" (p. 107).

But the reliability issue is not so easily dismissed, especially when one examines the strategy typically used to construct the index. After respondents rate the importance of each of the 24 job characteristics, the 12 professional items are summed and multiplied by a factor of two. The 12 non-professional items are also summed, and then subtracted from the summed professional items to correct for response bias: $(2\Sigma P) - (\Sigma NP)$. The resulting professional orientation score is a "difference score" subject to the reliability problems inherent with difference scores.

Cohen and Cohen (1975) discuss the reliability problems of difference scores. Specifically, as the correlations between the variables used to create the difference score approach their average reliability, the reliability of the difference score approaches zero. Examination of the formula used to calculate reliability for difference scores should make this clearer:

$$r_{x-y} = \frac{((r_{xx} + r_{yy})/2) - r_{xy}}{1 - r_{xy}}$$ where r_{xx} = the reliability of x and r_{xy} = the correlation of x with y

If, for example, the correlations between professional and non-professional items were equal to zero, and the separate reliabilities of the pro and non-pro items were equal to .60, the reliability of the difference score would be .60. But, if the non-pro and pro items were correlated at .30, and the reliabilities of both the pro and non-pro items were .60, the difference score reliability would be .43. Examination of Table 1 should indicate some concern for this phenomenon. The item-to-index correlations are relatively low. They range from -.04 to .64 for the 12 professional items, and from .44 to -.23 for the non-professional items.

This analysis suggests that the associations between the professional and non-professional items need to be examined further to learn whether these correlations are high enough to create concern for the reliability of the whole index. Table 2 presents the correlations from a secondary analysis of the Slattery and Fosdick (1979) study of photojournalists. As the matrix indicates, 40 percent of the correlations among the items intended to measure professionalism are not significantly different from zero. Also, 42 percent of the correlations among the non-professional indicators themselves are not significantly different from zero. We find, however, that 51 percent of the intercorrelations between the professional and non-professional items are

positive and significantly different from zero.

For this particular study one would have to question whether, given the relatively high intercorrelations between the pro and non-pro items, the traditional difference index is reliable. Although there were no reliabilities reported in this study, it is possible to calculate "average correlations" for those coefficients reported in Table 2. The average correlation for both the pro and non-pro items is .26. The average correlation between the pro and non-pro items is .23. Applying the reliability formula for difference scores, $r_{P-NP} = \frac{((.26 + .26)/2) - .23}{1 - .23} = .04$, indicates that our concern for the reliability of the traditional difference index for this study is warranted.

Validity Issues

Campbell and Fiske (1959) argue that "Reliability is the agreement between two efforts to measure the same trait through maximally similar methods," and "Validity is represented in the agreement between two attempts to measure the same trait through maximally different methods" (p. 83). Althauser and Haberlein (1970) point out that the difference between reliability and validity is not quite so claar. They argue that what better differentiates reliability from validity is the notion that only the underlying concept and random error can affect measures. Validity, in this notion, is a concern when there is more than one underlying concept or other unmeasured variables that affect the measures in addition to the one underlying concept and random error. "Accordingly, there is no viable distinction between 'reliability' and Campbell and Fiske's notion of 'convergent validity' . . ." (p. 152).

In addition to questioning the reliability (convergent validity) of this index, some concern should be registered for its validity.[2] Kerlinger (1973) suggests that validity can be viewed from a content, criterion or construct

perspective. Content validity is usually judgmental and asks whether the content of the instrument is representative of the universe of items representing a particular construct. The problem with this approach is that it assumes that the universe of items could be known. Criterion validity asks whether the instrument will predict other variables which are known to be associated with the construct. It is, however, often difficult to find a separate criterion to compare with, and to learn whether the criterion itself is a valid one. Finally, construct validity recognizes that the variable of concern is an abstraction, and part of some expected theoretical relationship to other variables. This is not an empirical approach. Rather, it is concerned with theory. A lack of a relationship between the construct under study and other variables which are part of the theory could challenge the validity of the measure, or the hypothesis itself. Therefore, it is difficult to determine whether the lack of an expected relationship is because of the measure, or because the theory is inadequate, or both.

Demonstration of construct validity requires both convergence (reliability) and discrimination. By this it is meant that different measures of the same construct should yield similar results, and the construct as measured should be able to be differentiated from other constructs. There is no single procedure to test for construct validity, but Campbell and Fiske (1959) provide an excellent discussion of different approaches.

The notion of discriminant validity assumes that those items designed to measure concepts unrelated to the concept of concern, or negatively related with the concept of study, should either be uncorrelated with the concept, or negatively correlated with the concept. Because we find (in Table 2) that the intercorrelations between the items designed to measure professionalism and those designed to measure non-professionalism are all positive (rather

than negative) and generally as strong as the correlations among the professionalism items themselves or among the non-professionalism items themselves, not only is the reliability (convergent validity) of this measure at issue, but also its discriminant validity.

To test this notion with studies of professionalism, one could examine the relationships among the various attributes of professionalism. With the eight "criteria" used to construct the McLeod-Hawley professional orientation index we would expect to find systematic relationships among the operationalizations of these attributes. Or, if we were to adopt Nayman's (1973) notion that there are four essential characteristics of professionalism (expertise, autonomy, commitment, and responsibility), we would expect to find systematic associations among operationalizations of these characteristics, as well as negative associations among these variables and those designed to measure non-professional attributes.

Factor analysis is used often in this type of validation effort (Kerlinger, 1973). This technique has the advantage of allowing separation of the unique variance from the common variance and reproduction of the patterns of the original correlations with the least number of factors. Figure 2 reproduces the results found in those few studies that reported a factor analysis of the professional and non-professional items in the McLeod-Hawley index, as well as the results of a factor analysis prepared by the author on the Slattery (1977) data.

It should be noted that each of the studies found from five to seven factors, and that most of the factors contained both professional and non-professional items from the index. In fact, a "pure" factor containing only professional or only non-professional items is the exception rather than the rule. This suggests, as did Table 2, that there is often a stronger

relationship among those items designed to measure concepts expected to be the antithesis of one another than those items designed to measure the same charact ristics or attributes.

It also should be noted that the items associated with one another (those comprising a factor) tend t vary from study to study. For example, in the McLeod and Hawley (1964) study, the item asking how important it is to have a job with an organization that is known and respected (item no. 5) is correlated with items asking about the importance of respect for the ability and competence of co-workers, and with the importance of freedom from continual close supervision over your work (item nos. 7 and 10). In the Nayman (1970) study, this same item (no. 5) is correlated with the non-professional items of the importance of having a job with prestige in the community, and having a prestigious job in the organization (item nos. 21 and 22).

Recognizing that these analyses were performed with four diverse groups of professional communicators (American newspaper journalists, Turkish journ lists, advertising agency personnel, and photojournalists) who might vary stantially in their attitudes toward the importance of various professionalism attributes, an effort was made to search for the consistency among the factor analysis findings, rather than the diversity. In addition to noting the predominance of mixed, as opposed to pure factors, it was noted that three factors appeared with relative consistency. McLeod and Hawley (1964), Nayman (1970), and Ward (1965) found that the importance of getting ahead in one's professional career and the importance of getting ahead in the organization (items 4 and 15) are strongly associated although each study labeled this factor differently (Advancement, Achievement and Mobility, respectively).

Another factor that seems consistent across three of the studies (McLeod and Hawley, 1964; Nayman, 1970; and Slattery, 1977) is a factor labeled

Influence. (Although the Ward, 1965, study reported an Influence factor, it was comprised of different items.) Influence in these studies is generally represented by the importance of having an opportunity to influence the public's thinking, and the importance of having influence on important decisions (items 8 and 11).

The third factor, Prestige, does not appear quite as consistent, but generally it was represented by: the importance of having a job with an organization that is respected by peers, the importance of having a job with prestige in the community, importance of a prestigious job in the organization, and the importance of having contact with important people (item nos. 5, 21, 22, and 23).

The Current Study

The preceding findings from the various professionalism studies that used the traditional difference approach to create a professional orientation index led to two general objectives for the current study.

The first is to examine the construct validity of this particular instrument. A professional orientation is an abstract concept which is composed of several attributes or "criteria" which, if the instrument is a valid one for various occupational groups, should be fairly consistent across groups, or as Nayman (1973) argued, the instrument should be a "standard" measure for all occupations. It is expected, based upon the factor analytic findings noted in the earlier studies for the four diverse communicator groups (American journalists, Turkish journalists, advertising agency personnel, and photojournalists), that the three factors which tend to be relatively consistent across studies (importance of advancement. prestige and influence) could be replicated for yet other communication occupations. The assumption is that the instrument provides items which are appropriate to measure the importance

of these three attributes of a professional or non-professional orientation, and can be applied to any occupational group.

The second objective is to compare (because of the reliability problems associated with difference scores, and the fact that reliability sets the upper limits for the amount of systematic variance which can be accounted for) the traditional difference score measure of a professional orientation with indices representing the underlying attributes of a professional orientation as predictors (criterion validity) of known correlates of professionalism.

If we refuse to assume that the traditional difference approach to calculating professional orientation values creates a reliable scale, and that a "true" professional always scores low on the so-called non-professional attributes, we are left with a different approach to analyzing data generated with this particular measurement instrument. We can attempt to generate the underlying attributes of a professional orientation and then argue for the criterion and construct validity of these attributes based upon known associations between professionalism and other variables, as well as the relationships among the underlying attributes themselves.

This strategy would allow us to compare the attributes stressed by one particular occupational group with another group as directed by our theoretical notions, or to make comparisons of these attributes within occupational groups. Some might want to argue, for example, that prestige and advancement will be more important factors for advertising and public relations practitioners, while journalists will place more importance on influence, and less on prestige and job advancement. Similar arguments might be made across cultures for these dimensions of professionalism.

An historical trend theory might contend that as professionalization progresses for an occupational group, the emphasis changes from one of prestige

and advancement to one of influence. An economic perspective might conclude the reverse--as an occupational group experiences economic stress, the focus will move to job advancement with less emphasis on influence. The point to be made is that focusing on the components of this construct rather than the sum of its parts allows us to develop an understanding of the professionalization process, not merely describe the current state.

The data to be analyzed here were gathered in 1979 from a systematic random sample drawn from the 1978 membership roster of the Public Relations Society of America (PRSA). The questionnaire was designed to gather information about professional orientations, professional activities, and other variables of interest to the researchers. Two mailings (N=250) produced a return rate of 72.4 percent (181 questionnaires). After removing those from practitioners who had moved, were retired, or were no longer in public relations, 161 of the questionnaires were usable (64.4 percent).[3]

To measure the professional orientation of this occupational group, the 24-item index developed by McLeod and Hawley (1964) was used.[4] Respondents were asked to rate on a scale from 1 (extremely important) to 4 (not important) how important each of the attributes were to them "in any job."

Because this is a secondary analysis (these data were not gathered for this purpose, but rather by Jacob, 1979, and the author for other purposes), the number of variables available as criterion variables are limited. This is not, however, a severe limitation as later analysis will indicate.

Locating Criterion Variables

The first step in this validation process was to locate criterion variables that could be expected to be related to attributes of a professional orientation. For this particular group of communicators, there were two relevant

studies that examined notions of professionalism, but used measures other than the traditional difference index. Wright (1979) in his study of PRSA members found that accredited members (who some would argue have demonstrated a level of professionalism by taking and passing an extensive accreditation examination) attend more PRSA national conferences, and local meetings; hold more offices in the organization and serve on more committees than non-accredited members. Non-accredited members, however, attend more workshop refresher courses. There was no difference for these two groups in terms of reading professional journals (Public Relations Review and Public Relations Journal), time spent reading in general, and the number of extension courses taken to increase professional knowledge. Also, this study found no significant differences for the professional value of autonomy, ability to perform technical tasks and to perform services, involvement in decision making, perceived respect of management, peer recognition, income, supervisor recognition, or job security. But, accredited members were more likely to spend time on the job responsibilities of counseling management on public relations, while non-accredited members were more likely to spend more time in editing, staging special events, creative activities such as graphics, and preparing institutional advertising.

These task orientations were similar to those identified by Grunig (1976) in a survey of public relations practitioners in the Baltimore-Washington area. He contrasted professional-type organizations with careerist-type organizations. He found a low but significant correlation between information-seeking public relations activities and his professionalism scale that emphasized professional training. On the other hand, careerist-type organizations (less emphasis on professional training) were more likely to issue press releases, have formal and informal contact with the press, prepare institutional ads, and to stage events. Here the goal was persuasion rather than understanding.

If we can assume that the influence attribute of a professional orientation represents "more" professional attitudes and values, we would expect that those who stress influence (having a job that is valuable and essential to the community, and an opportunity to have an influence on the public's thinking, and on important decisions) will tend to engage in other activities and behaviors associated with professionalism. Also, we would expect that those who strongly emphasize advancement and prestige (getting ahead in their professional career, and in their organization; and having a job with an organization that is known and respected, with prestige in the community and in the organization, and that brings them in contact with important people) would be less likely to engage in professional behaviors.

Based upon the Wright (1979) and Grunig (1976) findings we would expect the following behaviors for those who emphasize the importance of influence: active involvement in professional organizations, and involvement in the job activities of counseling management and information-seeking. On the other hand, those who stress the "less professional" attributes of prestige and advancement should be engaged in educational opportunities such as workshop/refresher courses, and job activities such as editing, staging events, issuing press releases, and other technical communication activities. These two studies would lead us to expect that there would be no differences for amount of reading of professional journals.

It should be noted that some of these expectations are contrary to what the criteria for a professional orientation would suggest. Nayman (1973) argued that expertise is an essential criterion for professionalism, and assumes that specialized knowledge and skill are essential. This theory would suggest that there should be a positive association between the desire for influence and education--including educational background, continuing

education, and the gaining of knowledge through the reading of professional journals.

These findings, as well as traditional notions that professionalism is associated with education, experience, age, and organizational membership (Johnstone, Slawski and Bowman, 1973) were used to select criterion variables for the second objective. There are five different categories of criterion variables used in this study: education[5], experience[6], professional recognition and organizational involvement[7], job activities[8], and demographics[9].

The Findings

The first step in the analysis was to perform a factor analysis (Variamax Rotated Factor Matrix) on the professional and non-professional items. Table 3 presents the results of this analysis. As with most of the studies mentioned earlier, the six factors that emerged were all mixed factors, except for the fifth factor, in that professional and non-professional items loaded on the same factor. The labels used in the McLeod and Hawley (1964) study have been retained as appropriate. The six factors are named: Expressiveness, Influence/Prestige, Advancement, Human Relations, Job Security, and Learning.

Figure 3 compares the factors in the current study with those from the earlier studies and notes the items common to several of the studies. Although this study appears to replicate the factors from the McLeod and Hawley work, it should be noted that the items that comprise the factors tend to vary from study to study. Also, this analysis of public relations practitioners found that prestige and influence were not two separate factors. Rather, for this group, there was a strong association between a desire for prestige in the community, and a desire to influence the public's thinking.

The second step was to create indices from the professional and non-professional items. First, factor scores were used to create an index for

each particular factor. These indices were standardized using the following formula: (Index 1 = Factor Score 1 * (Item 1 - $\bar{X}1$)/S.D.1 + ... + Factor Score 24 * (Item 24 - $\bar{X}24$)/S.D.24). Next, the traditional difference measure of a professional orientation was created by summing over the professional items, multiplying this score by a factor of two, and subtracting the summed non-professional items: (2ΣP) - (ΣNP). Finally, a simple professional index was created by summing over the professional items (ΣP), and a separate non-professional index was created by summing over the 12 non-professional items (ΣNP). Coefficient alpha was .76 for the simple summed professionalism score (ΣP), and .75 for the simple summed non-professionalism score.

Table 4 reports the correlations between the simple summed professional index (ΣP), the summed non-professional index (ΣNP), and the traditional difference measure, as well as the correlations between the factor indices and these three summed indices. It should be noted that the summed professional index (ΣP) is correlated .80 with the summed non-professional (ΣNP) index. This correlation and the coefficient alphas for these two indices will allow us to compute a reliability score for the traditional professionalism index: (2ΣP) - (ΣNP). Using the formula mentioned earlier for the reliability of difference scores, $\frac{((r_P + r_{NP})/2) - r_{P,NP}}{1 - r_{P,NP}} = \frac{((.76 + .75)/2 - .80}{1 - .80} = .00$

It is quickly apparent that because of the strong correlation between the professional and the non-professional summed index (.80), the difference score is totally unreliable.

Table 5 presents a more graphic picture of the problem. The simple summed professional index, the simple summed non-professional index and the traditional difference index were trichotomized into high, medium, and low scorers on the respective indices corresponding to traditional uses of the indices. It can

be noted, for example, 21.9 percent of the total sample scored high on the professional summed items and the non-professional summed items, while less than one percent of the sample scored high on the professional items and low on the non-professional items. In other words, there were very few individuals in this sample who placed high importance on the professional attributes and at the same time low importance on the non-professional attributes. In fact, when we view the relationship between the traditional difference measure (which was thought to minimize the emphasis on non-professional attributes) and the summed non-professional items (r=.42), we find that 17.1 percent of our sample would be categorized as both high on the traditional difference measure of a professional orientation and high on the attributes thought to measure a non-professional orientation. If we were to assume that the traditional difference index is a measure of professional orientation, we would have expected that most of those scoring high on this index to have scored low on the non-professional attributes.

Table 6 reports the correlations between the selected criterion variables and the various indices. As expected, overall, the factors serve as stronger correlates of the criterion variables than do the summed indices. Other than for the job activities associated with the roles of Good-Will Ambassador, Meeting Organization, Industrial Relations, and Community Relations, the summed indices are generally not related to the criterion variables, in spite of the fact that the two simple summed indices had reliability coefficients of .75 and .76.

The earlier findings of the Slattery study (1977) and the Jacob (1979) study are replicated here for the traditional difference score professional orientation index. Females tend to score higher on this index than males. This appears to be related more to the spurious nature of the index, than to

actual differences between the sexes, because the learning factor is the only factor for which there is a difference between males and females. Females tend to consider the opportunity to learn new skills and knowledge more important than males.

Also, the direction of the relationships for the various factors is generally what we would expect for these criterion variables. The influence/prestige factor tends to be positively related to such criterion variables as experience, organization involvement, and management-type job activities. On the other hand, the advancement factor, the job security factor, and the learning factor tend to be negatively associated with education, experience, and organizational involvement. Those with lower levels of education, fewer years of experience, and low levels of organizational involvement tend to consider job advancement, job security and opportunity for learning important. The expressiveness factor tends to be unrelated to the criterion variables. Figure 4 summarizes the major ($p.<.01$) relationships between the criterion variables and the professional orientation factors.

Conclusions

This paper has raised questions not only about the reliability of difference scores to create an index of professional orientation but also the construct and criterion validity of this particular measure. McLeod and Hawley (1964) said that their original purpose was ". . . to develop a measure of professional orientation for journalists" (p. 530). They argued that the more professionally oriented ". . . person should place heavy emphasis on service, intellectual activity, autonomy and influence" (p. 530). The underlying assumption of the difference approach to creating this measure of professionalism was that while professionally oriented people should stress the aforementioned attributes, "on the other hand, they should give less

emphasis to the monetary, security, prestige, and human relations aspects of a job" (p. 531). The problem is, as Kessler (1977) so artfully demonstrates,

> . . . in the construction of conceptual variables it has been cautioned that change scores (more generally referred to as 'difference scores' in this context) often are faulty indicators of the true theoretical concept which the analyst seeks to examine, and that they should be used with caution" (p. 44).

The primary caution is not only that there must be a reasonable degree of reliability for the variables comprising the conceptual variables, the observed relationship between the positive and negative component variables must be relatively low. To obtain a reliability coefficient of .78 for the difference score when the reliability of both the component variables is .80, the correlation between the component variables must be less than .20.

The current study and examination of correlation matrices from earlier studies indicates that this is rarely the case, regardless of the occupational group under study. It appears that the traditional use of difference scores to create an index of professional orientation produces a measure that is spurious under conditions where the respondents place equal importance on professional and non-professional attributes. And given that the factor analytic results from the various studies using this measure indicate that this is quite common, it is argued that the continued use of this difference approach is inappropriate.

This paper also raised questions about the underlying attributes associated with the construct of a professional orientation, and whether other criteria could be used to establish the validity of those attributes for this particular measure of professional orientation.

Nayman (1973) argued that those essential attributes were autonomy, expertise, responsibility and commitment. These attributes are quite similar to McLeod and Hawley's (1964) stress on intellectual activity, autonomy,

service, and influence. The question is whether the factors developed in the current study and those found in earlier studies are representative of these attributes (assuming that these are valid criteria for a professional orientation). Figure 5 outlines the items from this index which tend to be correlated (comprise a factor) across the various studies of professional orientations. Liberally interpreting the criteria set forth by McLeod and Hawley (1964) and Nayman (1973) two of these dimensions (expressiveness and influence) would be considered attributes of a professional orientation. The others, (prestige, advancement, job security and human relations) would be attributes of a less professional orientation. However, the current study found that a stress on the importance of influence was so strongly related to a stress on the importance of prestige, that these items comprised one factor. In addition, it was this influence/prestige factor, and the human relations factor which were positively associated with other known correlates of professionalism such as experience in the occupation, involvement in organizations, recognition by the peers of those in the occupation, age, and the type of job activities the occupational group saw as appropriate for someone in their position.

Expressiveness, and a desire to learn, suggested by McLeod and Hawley (1964) and Nayman (1973) as attributes of a professional orientation, tend to be negatively associated with or unrelated to these other known correlates of a professional orientation.

These findings raise several possibilities. First, one must ask whether a stress on the importance of human relations (as measured by the importance of respect for the ability and competence of co-workers, and working with people rather than things) might well represent a professional orientation rather than a non-professional orientation. Becker, et al., (1979) found

that the,

> . . . professionally committed are higher in non-professional values, more neutral and less critical of the media . . . less likely to be Guild members, and less likely to work for large organizations . . . more likely to be married with families and be high in professional involvement . . . and they are satisfied with their jobs. p. 759

These may be individuals who would tend to stress the importance of human relations rather than deemphasize it as McLeod and Hawley (1964) originally suggested.

Second, one must question whether a stress on the importance of influence (opportunity to have an influence on the public's thinking, for example) and a stress on the importance of prestige (having a job with prestige in the community, for example) should be viewed as incompatible with a professional orientation. If one assumes that the occupational member progresses through stages in career development, it seems reasonable to argue that in the early stages of one's professional career when there is likely to be less job experience, peer recognition, and organizational involvement, a professional orientation could include not only a stress on the importance of influence, but a recognition that a stress on job advancement and job security are pre-requisites for prestige and influence. In this sense job advancement, job security, and prestige can be viewed as pre-professional orientations rather than non-professional orientations. Becker et al., (1979) also argue for a temporal notion with regard to the influences on the individual in his profession,

> . . . so that background and training influences precede occupational sentiments, which may be a consequence, particularly, of the training. Occupational sentiments precede job selection. As a consequence they are temporally prior to the influences of organizational and extra-organizational variables. These variables, in turn, precede specific job sentiments, which are followed by job satisfaction. (p. 755)

Finally the lack of a relationship between the expressiveness factor and the other correlates of a professional orientation raises some interesting questions.

This attribute was the attribute which was most highly valued by this occupational group (followed by a desire to learn new skills and knowledge, human relations, advancement, job security, and finally influence/prestige).[10] It appears that although this occupational group most highly values expressiveness, and least highly values influence/prestige, expressiveness is not related to other attributes of professionalism. Becker, et al., (1979) noted a similar finding. They found no difference for the professionally-committed for either a professional orientation, or stress on the importance of freedom from supervision. They did find, however, that the professionally-committed had more actual autonomy in their jobs.

The above finding raises some questions about whether these expressiveness items represent attributes which are components of the professional orientation construct (particularly autonomy) or whether they are importance of "job advantages" as Nayman (1970) called them, or importance of job activities as Ward (1965) labeled this factor. Use of this particular instrument may require yet other items to represent an orientation toward the importance of autonomy.

In conclusion this paper is not suggesting abandonment of this particular approach to measuring the professional orientation of journalists and other communication occupations. Rather it is being argued that the underlying attributes of a professional orientation need to be carefully explicated and validated by various approaches before we can begin to talk about a general "professional orientation." Also, we need to examine our assumptions about whether a professional orientation is incompatible with an orientation toward job security, job advancement and a desire for prestige, as well as orientation toward human relations. In today's society, the "true" professional may be the individual who not only places great importance on social commitment,

social responsibility, autonomy, opportunities for learning, and the ability to influence others in society, but also recognizes the importance of good human relationships, job security and job prestige as prerequisities for professional attitudes.

Finally, a word with regard to the limitations of this study; these findings were generated from secondary analyses of data gathered for other purposes than for the validation of a particular measuring instrument. No hypotheses were developed prior to the development of the questions and gathering of the data. In this sense all of the analyses are post hoc and should be treated conservatively with the reservations due post hoc secondary analysis.

Figure 1. Professional Attributes or Characteristics Identified by Various Studies of Professionalism

	Greenwood (1957)	Blau and Scott (1962)	McLeod & Hawley (1964)	Hughes (1965)	Nayman (1973)
1.	Community Sanction		Be given a broad range of autonomy	Autonomy	Autonomy
2.	Have a code of ethics	Guided by universalistic norms	Have a code of ethics clarified by concrete cases	Close solidarity	
3.		Expertise stressed	Have a long period of specialized training	Claim to high skill	Expertise
4.	Systematic body of theory		Emphasize intellectual techniques	Claim to esoteric knowledge	
5.	Professional authority		Accept broad personal responsibility for judgments and actions		Responsibility
6.		Work in client's interest not self-interest	Greater emphasis on service than on private economic gain		Commitment
7.	Professional culture		Develop a comprehensive self-governing organization		
8.		Professional status achieved not ascribed		High place	
9.			Must perform a unique & essential service		
10.		Ne. .lly affective relationships with clients			
11.				Affiliation with educational institution	
12.				Balance of practical with theoretical	
13.				Recognition	

Figure 2. Comparison of Factor Analytic Results of Four Studies of Professional Communicators Using the McLeod-Hawley Index

Study	Sample	Factors	Items[a] Professional 1 2 3 4 5 6 7 8 9 10 11 12	Non-Professional 13 14 15 16 17 18 19 20 21 22 23 24	Mixed=M Pure=P
McLeod-Hawley (1964)	115 Editorial & Non-Editorial Employees of Milwaukee Journal & Sentinel	Expressiveness	X X - - - - - - - - - -	- - - - - - X - - - - -	M
		Advancement	- - - [X] - - - - - - -	- - [X] X - - - - - - - -	M
		Respect	- - - - [X] - X - - X - -	- - - - - - - - - - - -	P
		Influence	- - - - - X - [X] - - [X] X	- - - - - - - - - - - -	P
		Human Relations	- - - - - - - - - - - -	X X - - X - - - - - - -	P
		Prestige	- - - - - - - - - - - -	- - - - - - - - [X] [X] [X] -	P
		Security	- - - - - - - - - - - -	- - - - - X - X - - - X	P
		Unique	- - X - - - - - X - - -	- - - - - - - - - - - -	
Nayman (1970)	210 Turkish Journalists Employed by 15 Turkish Newspapers	Social	- - - - - - X - X - - -	- - - - - X - X - - - b	M
		Achievement	- X - [X] - - - - - - -	- - [X] X - - - - - - -	M
		Prestige	- - - - [X] - - - - - -	- - - - - - - - [X] [X] -	M
		Advantages	X - - - - X - - - - - -	X - - - - - X - - - -	M
		Influence	- - - - - - - [X] - - [X] X	- - - - - - - - - - [X]	M
		Job Activity	- - X - - - - - - - - -	- - - - X - - - - - -	M
		Employment	- - - - - - - - X - - -	- X - - - - - - - - -	M
Ward (1965)	128 Advert. Agency Personnel	Job Activities	X - X - - - X - - - - -	b b X - - - X - - - - -	M
		Mobility	- - - [X] - - - - - - -	- - [X] - - - - - - - -	M
		Human Relations	- - - - - - - - X - - -	- - - - - X - X - - -	M
		Prestige	- - - - - X - - - - - -	- - - - - - - - [X] - [X] -	M
		Influence	- X - - - - - - - - X -	- - - - - - - - - - - -	P
		Unique	- - - - [X] - - [X] - X [X] -	- - - X - - - - - [X] - X	
Slattery (1977)	91 Female & 116 Male Photojourn. Members of NPPA	Prestige	b - - - [X] - - - - - - -	- - - - - - - - - [X] [X] [X] -	M
		Human Relations	- - - - X X - X - - X -	- X - - X - - - - - - -	M
		Expressiveness	X X X - - - - - - - - -	- - - - - - - - - - - -	P
		Security	- - - - - - - - - - - -	- - - X - X - - - - - X	P
		Influence	- - - - - - - [X] - - [X] -	- - - - - - - - - - - -	P
		Excitement	- - - - - - - - X - - -	X - - - - - X X - - - -	M
		Unique	- - - - - - - - - - - -	- - [X] - - - - - - - -	

[a] See Table 1 for the composition of each of these items.
[b] This item was not used for this particular study.
[X] Items with some degree of consistency across studies

Figure 3. Comparisons of Factors Developed From the Current Study With Factors From Other Studies of Professionalism[a]

FACTORS FROM CURRENT STUDY		FACTORS FROM OTHER STUDIES		COMMON ITEMS
Factor	Composed of Items:		Composed of Items:	Items Common To Several of the Studies
1. Expressiveness	1 2 10 11 13 19	McLeod-Hawley--Expressiveness	1 2 19	
		Nayman--Advantages	1 6 13 19	
		Ward--Job Activities	1 3 7 13 19	
		Slattery--Expressiveness	1 2 3	
		--Excitement	10 13 19 20	1 2 13 19
2. Influence/ Prestige	5 6 8 21 23	McLeod-Hawley--Prestige	21 22 23	
		--Influence	6 8 11 12	
		Nayman--Prestige	5 21 22	
		--Influence	8 11 12	
		Ward--Prestige	6 21 23	
		--Unique Items	5 8	
		Slattery--Prestige	5 21 22 23	
		--Influence	8 11	5 6 8 11 21 22 23
3. Advancement	4 9 15 16 22	McLeod-Hawley--Advancement	4 15 16	
		Nayman--Achievement	2 4 15 16	
		Ward--Mobility	16 22	
		--Unique Items	4 15	
		Slattery--None		4 15 16
4. Human Relations	7 17 20	McLeod-Hawley--Human Relations	13 14 17	
		Nayman--Social Factor	7 9 18 20	
		Ward--None		
		Slattery--Human Relations	6 7 9 12 14 17	7 17
5. Job Security	14 18 24	McLeod-Hawley--Security	18 20 24	
		Nayman--None		
		Ward--None		
		Slattery--Security	16 18 24	18 24

[a] See Table 1 for the composition of each of these items

Figure 4. Summary of Observed Relationships Between Professional and Pre-Professional Orientations and Other Correlates of Professionalism

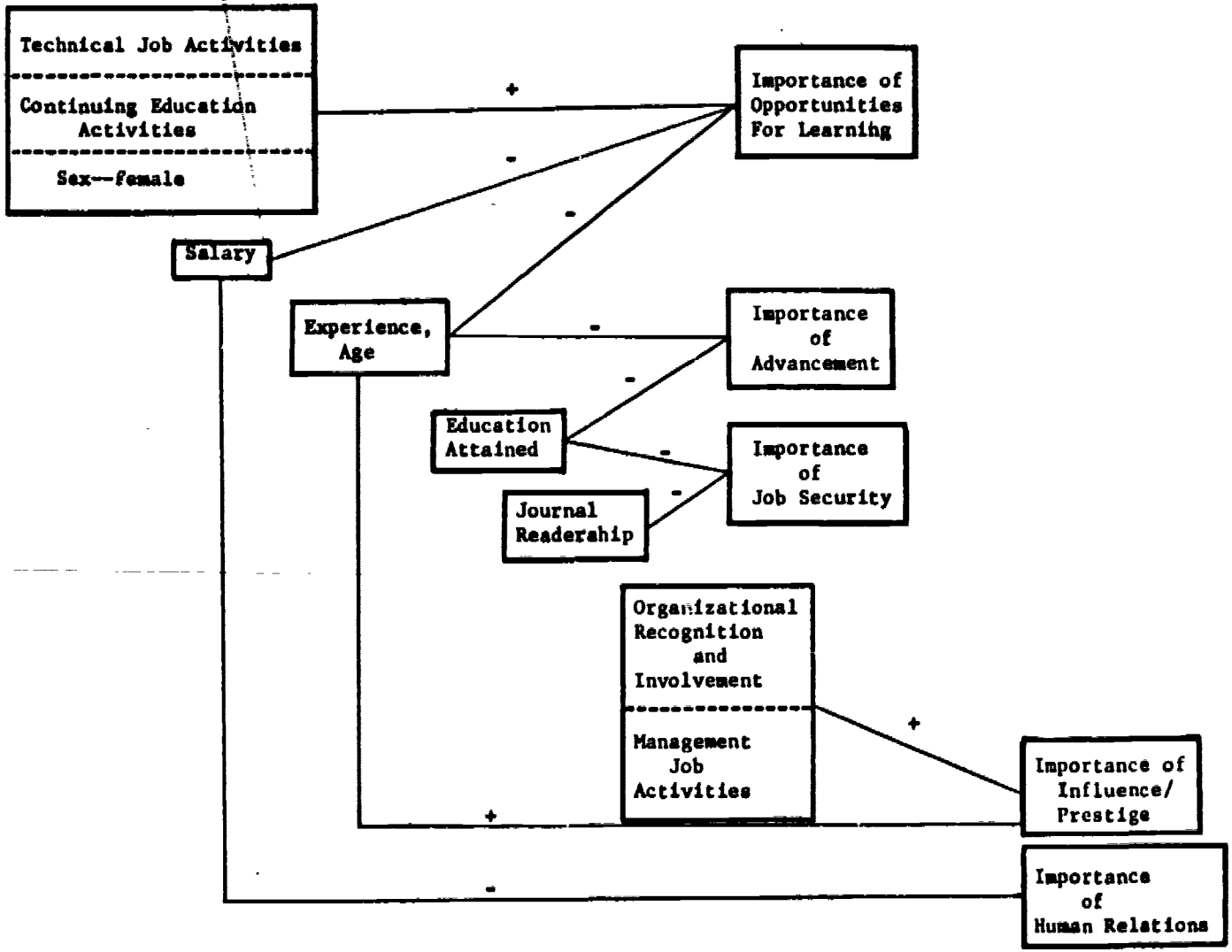

Figure 5. Items representing Factors Associated With the McLeod-Hawley Professional Orientation Index Across Various Studies of Professionalism[a]

Item No.	
	EXPRESSIVENESS
1.	Full use of your abilities and training
2.	Opportunity for originality and initiative
13.	An enjoyment of what's involved in doing the job
19.	Excitement and variety the job provides
	INFLUENCE
6.	Having a job that is valuable and essential to the community
8.	Opportunity to have an influence on the public's thinking
11.	Having an influence on important decisions
	HUMAN RELATIONS
7.	Respect for the ability and competence of co-workers
17.	Working with people rather than things
	PRESTIGE
5.	Having a job with an organization if this known and respected by peers
21.	Having a job with prestige in the community
22.	Having a prestigeful job in the organization
23.	A job that brings me in contact with important people, e.g., community and state leaders
	ADVANCEMENT
4.	Getting ahead in your professional career
15.	Getting ahead in the organization you work for
16.	Salary: earning enough money for a good living
	JOB SECURITY
18.	Security of the job in its being fairly permanent
24.	A job that does not disrupt my family life

[a] McLeod and Hawley, 1964; Ward, 1965; Nayman, 1970; Slattery, 1977, and the current study.

Table 1. Professional and Non-Professional Items Reproduced from the McLeod and Hawley (1964) Study, and Item-to-Total Index Correlations Reported in the Nayman (1970) Study, and the Ward (1966) Study

Question: "People look for different things in their occupations which make their work satisfying to them. Below are some job characteristics that can be applied to most occupations. First, we would like to know how important to you they are in any job. For each is it: 1) Extremely important, 2) Quite important, 3) Somewhat important, or 4) Not important?"

		"RELIABILITIES"[a]	
	PROFESSIONAL ITEMS	Nayman	Ward
1.	Full use of your abilities and training	.62	.36
2.	Opportunity for originality and initiative	.52	.55
3.	Opportunity to learn new skills and knowledge	.36	.18
4.	Getting ahead in your professional career	.41	.14
5.	Having a job with a paper that is known and respected by journalists all over the United States	.52	.12
6.	Having a job that is valuable and essential to the community	.59	.17
7.	Respect for the ability and competence of co-workers	.18	.13
8.	Opportunity to have an influence on the public's thinking	.64	.42
9.	A supervisor who appreciates the time you spend in improving your capabilities	.04	-.04
10.	Freedom from continual close supervision over your work	.07	.15
11.	Having an influence on important decisions	.54	.36
12.	A job that makes the organization different in some ways because I work for it	.47	.44
	NON-PROFESSIONAL ITEMS		
13.	An enjoyment of what's involved in doing the job	.40	-.04
14.	Availability of support: working with people who will stand behind a man--help out in a tough spot	-.03	b
15.	Getting ahead in the organization you work for	.06	-.06
16.	Salary: earning enough money for a good living	.09	-.11
17.	Working with people rather than things	.28	b
18.	Security of the job in its being fairly permanent	-.06	-.12
19.	Excitement and variety the job provides	.44	.03
20.	Being with people who are congenial and easy to work with	.01	-.23
21.	Having a job with prestige in the community	.01	-.07
22.	Having a prestigeful job in the organization	.06	-.06
23.	A job that brings me in contact with important people, e.g., community and state leaders	.34	.00
24.	A job that does not disrupt my family life	b	-.13

[a] Item-to-total index correlations

[b] This item was not included in this particular study.

Table 2. Pearson Correlation Coefficients From a Secondary Analysis of the Slattery Study of Photojournalists Using 23 Items from the McLeod-Hawley Professionalism Index.

ITEMS[a]	PROFESSIONAL ITEMS											NON-PROFESSIONAL ITEMS											
	1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PROFESSIONAL:																							
1. Abilities & Training	-																						
2. Originality & Initiative	48	-																					
3. News Skills & Knowledge	33	31	-																				
5. Job w/Respected Org.				-																			
6. Job Valuable & Essential		21		19	-																		
7. Respect for Co-workers	35	24	24		32	-																	
8. Influence Public Thinking	17	24			34	22	-																
9. Supervisor Appreciates	25		24	18	25	37		-															
10. Freedom From Supervision							17		-														
11. Influence Decisions	25	25	24		21	22	41			-													
12. I Make Org. Different	19	19	21	21	31	16		38		16	-												
NON-PROFESSIONAL																							
13. Enjoyment of Job	23	23	23		22	22		25	22			-											
14. Support from Employer	31	28	19		39	39		41		16	28	17	-										
15. Getting Ahead in Org.				21	30			24		25	27			-									
16. Salary	21	16		26	17	17		17	17	18			18	32	-								
17. Work w/People Not Things			17	17	24	26		25					25			-							
18. Security of the Job				18		16		16			17		18	32	41		-						
19. Excitement & Variety	21	24	23	20			17	16			25	27				22		-					
20. Congenial Co-Workers	19					28		31			28	19	31				19	31	-				
21. Community Job Prestige				31	46	26	22	17		16	16			26	20	17	22	18	16	-			
22. Prestige Job in Org.				30	19		19	17		25	26			55	26		30	16	18	47	-		
23. Contact with VIP's				32	16		20			21	22			31			23	23	20	38	46	-	
24. Job Not Disrupt Family				17										18	21		25		28	28	24	20	-

[a] See Table 1 for the complete text of these items

This table presents only Pearson correlation coefficients which are significant at the .01 probability level. The decimal points have been dropped for the sake of parsimony.

Table 3. Factor Analysis of Professional and Non-Professionalism Items for Sample of PRSA Public Relations Practitioners (Varimax Rotated Factor Matrix). N = 146[a]

McLeod-Hawley Item Number/ Profess. = P Non-Pro. = NP		Description - See Table 1 for Full Text of Item	$\bar{x}$	s.d.	Factor Loadings[b] 1[c]	2	3	4	5	6	h^2
2.	P	Originality & Initiative	1.33	.59	.83						.71
19.	NP	Excitement & Variety	1.55	.72	.66					.26	.52
1.	P	Abilities & Training	1.40	.65	.64			.26			.48
13.	NP	Enjoyment of Job	1.31	.58	.51			.33			.39
10.	P	Freedom from Supervision	1.72	.85	.47						.34
11.	P	Influence Decisions	1.63	.75	.40	.31	.26				.33
21.	NP	Community Job Prestige	2.47	.96		.81	.35				.81
8.	P	Influence Public	2.07	.88		.71					.58
23.	NP	Contact with VIP's	2.62	.96		.69	.28				.58
6.	P	Job Valuable & Essential	2.18	.95		.54		.42			.53
5.	P	Job with Respected Organization	2.62	1.06		.38	.27		.29		.33
15.	NP	Getting Ahead in Organization	1.89	.83			.70				.57
4.	P	Getting Ahead in Career	1.82	.81			.57				.44
9.	P	Supervisor Appreciates	2.05	.93			.53	.35			.47
22.	NP	Prestige Job in Organization	2.30	.93		.43	.51				.49
16.	NP	Salary	1.69	.66			.39		.30		.36
17.	NP	Work with People	1.80	.84	.26			.58			.43
7.	P	Respect for Co-Workers	1.75	.71			.31	.55			.48
20.	NP	Congenial Co-Workers	1.90	.75				.55	.37		.52
18.	NP	Security of the Job	2.34	.85					.59		.37
24.	NP	Job Doesn't Disrupt Family	2.41	.96				.30	.47		.33
14.	NP	Support From Employer	1.77	.85	.27		.26		.45	.28	.44
3.	P	New Skills & Knowledge	1.83	.87	.33		.26			.87	.99

[a] Listwise deletion of missing cases reduced n to 146.

[b] Only factors loading greater than .25 are reported for the sake of parsimony.

Percent of Variance Accounted For

Factor	[c] Factor Labels	Total Variance	Factor Variance
1	Expressiveness	26.7	49.3
2	Influence/Prestige	11.7	19.5
3	Advancement	7.7	10.9
4	Human Relations	6.0	8.0
5	Job Security	5.5	6.7
6	Learning	4.6	5.8
		62.1	100.0

Table 4. Pearson Correlations of Professional Factor Variables with the Traditional Professional, the Simple-Summed Professional and the Simple-Summed Non-Professional Indexes.

PROFESSIONAL ORIENTATION FACTOR VARIABLES	TRADITIONAL PROFESSIONAL ORIENTATION INDEX (Σ P) - (Σ NP)	SUMMED PRO INDEX (Σ P)	SUMMED NON-PRO INDEX (Σ NP)
Expressiveness	.54**	.55**	.37**
Influence/Prestige	.39**	.52**	.50**
Advancement	.31**	.49**	.55**
Human Relations	.29**	.41**	.41**
Job Security	-.10	.21*	.54**
Learning	.33**	.28**	.11
Summed Professional Index	.88**	—	.80**
Summed Non-Professional Index	.42**	—	—

*P<.01
**P<.001

Table 5. Cross Tabulations of the Summed Non-Professionalism Index With the Traditional Professional Orientation Index and the Summed Professionalism Index

Summed Non-Professional Index (ΣNP)	Traditional Professional Index (2ΣP) - (ΣNP)				
	High	Medium	Low	Percent of total Sample	N
High	17.1%	8.9%	2.1%	28.0%	41
Medium	13.0	14.4	15.8	43.2%	63
Low	4.8	9.6	14.4	28.8%	42
Percent of total sample	34.9%	32.9%	32.2%	100.0%	
N =	51	48	47		146

$X^2 = 24.8$ d.f. = 4, $p < .0001$

Summed Non-Professional Index (ΣNP)	Summed Professional Index (ΣP)				
	High	Medium	Low	Percent of total Sample	N
High	21.9%	5.5%	0.7%	28.0%	41
Medium	8.9	21.2	13.0	43.2%	63
Low	0.7	8.2	19.9	28.8%	42
Percent of total sample	31.5%	34.9%	33.6%	100.0%	
N =	46	51	49		146

$X^2 = 76.6$, d.f. = 4, $p < .0001$

Table 6. Pearson Correlations of Traditional Professional, Simple-Summed Professional, and Simple-Summed Non-Professional Indexes; and Professionalism Factor Variables with Criterion Variables

Criterion Variables	Traditional Pro Index (2ΣP) - (ΣNP)	Summed Pro Index (ΣP)	Summed Non-Pro Index (ΣNP)	PROFESSIONAL FACTORS: Influence/ Prestige	Human Relations	Learning Advancement	Job Security	Expressiveness
EDUCATION								
Years of Education Past High School		-.15*	-.16*			-.19**	-.21**	
Hours of Continuing Education						.21**		
Number of Journals Read				.16*			-.19**	
EXPERIENCE								
Years in Public Relations				.28***		-.22**	-.19**	
Years in Journalism								
Years in Marketing			.19**		.17*		.18*	
Years in Advertising					.18*			
ORGANIZATION INVOLVEMENT								
Number of Awards Received				.23**				
Number of Organizations:								
A Member of	.15*			.18*		-.15*		
Attend Meetings of								
Contribute & to				.19**		-.15*	-.15*	-.16*
A Committee Member of				.15*				
Hold Office in				.18*		-.16*	-.15*	-.16*
TYPE OF JOB ACTIVITIES								
Management-Problem Solving				.20**				
Technical Journalism					.17*	-.37***		
Research				.26***				
Staff Management						-.20**		
Good-Will Ambassador	.20**	.33**	.40***	.28***	.22**		.18*	.20**
Meeting Organization	.24**	.26***	.19**	.22**			.21**	
Industrial Relations	.23**	.23**		.14*				.17*
Community Relations	.25***	.30***	.21**	.40***	.25***			
OTHER								
Salary				.18*	-.19**	-.37***		
Age				.33***		-.20**	-.18*	
MEANS--Sex[a]								
Male	17.7**	20.0	24.2	-.085	.067	.162**	.085	-.051	.050
Female	14.5	19.5	24.5	.190	-.151	-.363	-.191	.114	-.113

[a] The lower the mean score, the more important this particular attribute. The professionalism variables are standardized for the variables created by factor scores

* p<.05 ** p<.01 *** p<.001

Footnotes

[1] For other studies of professionalism see: Becker, et al., (1979), Cohen, (1963), Johnstone, et al., (1973), Lattimore and Nayman, (1974), LeRoy (1972-73), Linehan, (1970), Nayman, Atkin and O'Keefe, (1973), Nayman, McKee and Lattimore, (1977), Rivers, (1952), Slattery and Fosdick, (1979), and Weinthal and O'Keefe, (1974).

[2] If there was sufficient evidence for the validity of this particular measure, reliability could be assumed, because reliability is a necessary, but not a sufficient, condition for validity.

[3] See Ferguson, 1979 for a complete description of this study.

[4] One item, (No. 12, "A job that makes the organization different in some ways because I work for it,") was inadvertently omitted from this questionnaire.

[5] These questions asked the respondents the number of years of formal education past high school; number of hours of continuing education seminars, workshops or classes attended that include information on public relations; and the number of professional journals or periodicals read regularly.

[6] Experience was measured by asking respondents the numbers of years experience in public relations, journalism, advertising and marketing.

[7] Professional recognition and organizational involvement in professional, civic or social organizations were measured by the number of awards, honors, or citations received during the past five years as recognition of their work as a public relations practitioner; the number of organizations a member of; the number attending meetings of; contribute to financially; a committee member for; and hold an office in.

[8] The Problem-Solver Manager role includes such activities as planning and developing public relations programs, and managing specific programs. The Journalist Technical Communicator is concerned with such tasks as writing news releases, editing, and production of publicity materials. The Researcher role includes conducting opinion surveys and other forms of research. The Staff Manager is responsible for the management of public relations staff and the training of these staff members. The Good-Will Ambassador is the organization's representative. The Meeting Organizer organizes and conducts meetings, special events and conferences. The Personnel-Industrial Relations role is concerned with managing and maintaining employee relationships. The Public-Community Relations role is concerned with developing and maintaining community relations and contact with public officials. See Ferguson, 1979, for a complete description of these job roles.

9 The last set of criterion variables were demographic ones which asked the respondent's salary, age, and sex.

10 Average mean value for the items loading on each factor: expressiveness, 1.6; new skills and knowledge, 1.7; human relations, 1.9; advancement, 2.0; job security, 2.1; and influence/prestige, 2.3. For this scale a low value indicates extreme importance while a high value indicates not at all important; the scale values ranged from 1 to 4.

References

Althauser, R.P., and T.A. Heberlein, "Validity and the Multitrait-Multimethod Matrix," in E. Borgatta and G.W. Bohrnstedt (eds.), Sociological Methodology, San Francisco: Jossey-Bass Inc. 1970, pp. 151-169.

Barber, B. "The Sociology of Professions," in K.S. Lynn (ed.) The Professions in America, Boston, 1965, p. 15.

Becker, L.B., I.A. Sobowale and R.E. Cobbey, Reporters and Their Professional and Organizational Commitment," Journalism Quarterly, 56 (Winter, 1979), pp. 753-763, 770.

Blau, P.M. and W.R. Scott, Formal Organizations, San Francisco: Chandler, 1962.

Breed, W. "Social Control in the Newsroom," Social Forces, 33, 1955, pp. 326-35.

Campbell, D.T. and D.W. Fiske, "Convergent and Discriminatt Validation by the Multitrait-Multimethod Matrix." Psychological Bulletin, March, 1959, pp. 81-104.

Cohen, B., The Press and the Foreign Policy, Princeton, N.J.: Princeton University Press, 1963.

Cohen, J. and P. Cohen, Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences, New York: John Wiley & Sons, 1975.

Coldwell, T. "Professionalization and Performance Among Newspaper Photographers," M.A. thesis, University of Wisconsin, 1970.

Coldwell, T. "Professionalization and Performance Among Newspaper Photographers," Gazette, 20, 1974, pp. 73-81.

Eapen, K.E. "Journalism as a Profession in India: Two States and Two Cities," unpublished Ph.D. dissertation, University of Wisconsin, 1969.

Ferguson, Mary Ann, "Role Norms, Implicit Relationship Attributions and Organizational Communication: A Study of Public Relations Practitioners," unpublished M.A. thesis, University of Wisconsin-Madison, 1979.

Ferguson, Mary Ann, "Some Empirically-Generated Public Relations Roles and Associations with Various Descriptive Variables," a paper presented to the Public Relations Division, Association for Education in Journalism Annual Convention, Houston, 1979.

Graf, W.S. "Professionalism: A Case Study of Its Effects on Newspaper Performance," unpublished M.A. thesis, University of Wisconsin, 1971.

Greenwood, E. "Attributes of a Profession," Social Work, July, 1957, pp. 46-54.

Grunig, James E. "Organizations and Public Relations: Testing a Communication Theory, Journalism Monographs, 46, November, 1976.

Hallahan, K.E. "Professional Association Membership, Professional Socialization and Professional Orientation of the Public Relations Practitioner," unpublished M.A. thesis, University of Wisconsin-Madison, 1974.

Hawley, S.E., Jr. "Professionalization Among Newsmen: The Milwaukee Journal and Sentinel," unpublished M.A. thesis, University of Wisconsin, 1964.

Hughes, E.C. "Professions," in The Professions in America, op. cit., pp. 2-7.

Idsvoog, K.A. "Performance and Professionalism Among Wisconsin Television Journalists," unpublished M.A. thesis, University of Wisconsin-Madison, 1975.

Jacob, R.L. "Public Relations Practitioners: Gender as a Predictor of Professional Orientation," unpublished M.A. thesis, University of Wisconsin-Madison, 1979.

Johnstone, J.W.C., E.J. Slawski, and W.W. Bowman, "The Professional Values of American Newsmen," Public Opinion Quarterly, 36, 1973, pp. 522-540.

Kerlinger, F.N. Foundations of Behavioral Research, 2nd ed., New York: Holt, Rinehart and Winston, Inc. 1973.

Kessler, R.C. "The Use of Change Scores as Criteria in Longitudinal Survey Research," Quality and Quantity, 11, 1977, pp. 43-66.

Lattimore, D.L. "Professionalism and Performance: An Investigation of Colorado Daily Newspapers," unpublished Ph.D. dissertation, University of Wisconsin, 1972.

LeRoy, D.J. "Levels of Professionalism in a Sample of Television Newsmen," Journal of Broadcasting, 17, Winter, 1972-73, pp. 51-62.

Linehan, B.A. "Professional Orientation of Newsmen on State Dailies: A Wisconsin Newsmen Study," unpublished M.A. thesis, University of Wisconsin, 1970.

McLeod, J.M. and S.E. Hawley, "Professionalization Among Newsmen," Journalism Quarterly, 41, Fall, 1964, pp. 529-539.

McLeod, J.M. and R. Rush, "Professionalization of Latin American and U.S. Journalists, Part 1 and Part II," Journalism Quarterly, 46, Autumn, 1969, pp. 583-590 and 46, Winter, 1969, pp. 784-789.

Merton, R.K., "Some Thoughts on the Professions in American Society," Brown University Papers, No. 37 (Address before the Graduate Convocation, June 6, 1960), p. 9.

Nayman, O. "Professional Orientation of Metropolitan Turkish Journalists: A Communicator Analysis," unpublished Ph.D. dissertation, University of Wisconsin, 1970.

Nayman, O. "Professional Orientations of Journalists: An Introduction to Communicator Analysis Studies," Gazette, 19, 1973, pp. 195-212.

Nayman, O., C.K. Atkin, and G.J. O'Keefe, "Journalism as a Profession in a Developing Society: Metropolitan Turkish Newsmen," Journalism Quarterly, 50, 1973, pp. 68-76.

Nayman, O., B.K. McKee, and D.L. Lattimore, "PR Personnel and Print Journalists: A Comparison of Professionalism," Journalism Quarterly, 54, 1977, 492-497.

Reader, W.J. Professional Men, Great Britain, 1966.

Rivers, W.L. "The Correspondents After 25 Years," Columbia Journalism Review, 1952, pp. 4-10.

Rosten, L.C. The Washington Correspondents, New York: Harcourt, Brace and Company, 1937.

Selltiz, C., M. Jahoda, M. Deutsch and S.W. Cook, Research Methods in Social Relations, New York: Holt, Rinehart and Winston, 1961, pp. 166-186.

Slattery, K.L. "Male and Female News Photographers: A Profile of Professional Orientation," unpublished M.A. thesis, University of Wisconsin-Madison, 1977.

Slattery, K.L. and J. Fosdick, "Professionalism in Photojournalism: A Female/Male Comparison, Journalism Quarterly, 56, Summer, 1979, pp. 243-247.

Siebert, F.S., T. Peterson and W. Schramm, Four Theories of the Press, Urbana: University of Illinois Press, 1963.

Stark, R.W. "Policy and the Pros: An Organizational Analysis of a Metropolitan Newspaper," Berkeley Journal of Sociology, 1, 1962, pp. 11-32.

Ward, L.S. "Professionalization Among Advertising Agency Personnel," unpublished M.S. thesis, University of Wisconsin-Madison, 1965.

Weinthal, D.S. and G.J. O'Keefe, "Professionalism Among Broadcast Newsmen in an Urban Area," Journal of Broadcasting, 18, Spring, 1974, pp. 193-209.

Windahl, S. and K.E. Rosengren, "Newsmen's Professionalization: Some Methodological Problems," Journalism Quarterly, 55, Autumn, 1978, pp. 466-473.

Wright, Donald K., "Premises for Professionalism: Testing the Contributions of PRSA Accreditation," paper presented to the Public Relations Division, Association for Education in Journalism Annual Convention, Houston, 1979.